

IN THE ABSTRACT:

Please amend the abstract as follows. No new matter has been introduced.

The present invention relates to an optoelectronic sensor for 5
5 demodulating a modulated photon flux (50), and to a measuring device, in particular for 3D
distance measurement, having at least one optoelectronic sensor of this type. The
optoelectronic sensor has at least two collecting zones 10 (20, 22) introduced in a
semiconductor region (10), which collecting zones are for example diffused into the
semiconductor region and doped inversely with respect to the semiconductor region (10).
10 The collecting zones (20, 22) serve for collecting and tapping off minority carriers 15
generated upon penetration of a modulated photon flux (50). Furthermore, at least two
control zones (32, 34) are introduced in the semiconductor region (10), which control zones
generate a drift field in a manner dependent on a control voltage that can be applied to the
control zones (32, 20-34), the control zones (32, 34) being of the same doping type as the
15 semiconductor region (10).

(Figure 1)